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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,795	11/06/2003	Elizabeth Tai	2001P12800US01	4815

7590

11/15/2005

Elsa Keller, Legal Administrator
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EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,795

Applicant(s)

TAI ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24,27-32,34-41 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24,27-32,34-41,44-49 and 51 is/are rejected.
- 7) ☒ Claim(s) 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/6/03 & 5/6/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-11-2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 26, 2005 has been entered.
2. The amendment to the claims dated July 26, 2005 has been entered. Claims 24, 27, 28, 31, 35, 38, 41, 44, 45, 48, and 49 have been amended. Claims 50 and 51 have been added. Claims 24, 27-32, 34-41, and 44-51 are pending.
3. The amendment to the specification submitted July 26, 2005 is acknowledged and has been entered.
4. The rejection of claims 24, 27-32, 34-41, and 44-49 under 35 U.S.C. 112, second paragraph, set forth in the Office action mailed April 26, 2005, paragraph 8, is withdrawn due to the amendment.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 24, 27-32, 34-41, 44-49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (EP 0 732 868 A1) in view of Konuma et al. (US 2001/0019133). Nagayama teaches an organic electroluminescent display panel and method for manufacturing the same. The panel has a plurality of emitting portions including a substrate, first electrode, electrical insulation ramparts projecting from the substrate, organic functional layers including at least one organic electroluminescent medium, second electrode (see abstract). Figure 3 clearly shows that the organic functional layers (8) are separated by the insulative part (7). The insulative part reads upon the “insulating structure separating the electro-luminescent organic layer into a plurality of light-emitting elements”. The organic El media may include an organic hole transport layer, an organic emitting layer and an organic electron transport layer (see col. 7, lines 50-55). In the Nagayama device, pixels are formed (see col. 2, lines 12-25). The insulative structure (7) is formed on the electrode layer (3) spaced apart from each other per the instant apertures of instant claim 27. The insulating structure (7) depicted in Figure 7 reads upon the bank structure recited in instant claim 28. Insulating structure (7) further comprises an overhang portion (7a), which reads upon the overhang portion recited in instant claims 29 and 48. Nagayama discloses depositing the layers of the light-emitting device according to the steps of instant claim 31 (see col. 4, lines 5-52) and teaches all the components of method claims 34-36, and 37-40. Nagayama teaches an insulating section (7) comprised of polyimide and silicon dioxide (see col. 8, lines 28-36) per the insulative structure of the instant claims, but fails to teach poly-siloxane as a suitable insulative material for forming the insulating section. Konuma et al. teaches in analogous art a light-emitting device comprising insulative material. Konuma et al. teaches polyimide resin and a resin containing a high molecular compound of siloxane are

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equivalent materials (see Konuma et al. (page 1, paragraph [0013])). It would have been obvious to one of ordinary skill in the art to have used a high molecular weight siloxane in the Nagayama device as the insulative material, because Konuma teaches high molecular weight siloxane may be used in place of polyimide as an insulative material. With regard to claim 51, the polysiloxane is deemed inherently to have a "non-wetting" property as described by applicant.

Nagayama discloses vacuum deposition is used in forming the organic layers, but fails to disclose the methods of depositing the organic layer per instant claim 32. Konuma et al. teaches in analogous art that the organic EL layer may be formed by spin coating or by using ink jet methods. It would have been obvious to one of ordinary skill in the art to have used spin coating or ink jet methods for forming the Nagayama organic EL layers, because Konuma et al. teach these methods as conventional methods in the art for forming organic EL layers.

With regard to the method limitations of claims 24 and 41 these are considered to be product-by-process type limitations. See M.P.E.P. § 2113.

Allowable Subject Matter

7. Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Neither Nagayama nor Konuma teach or render obvious the method of forming polysiloxane bank structures according to claim 50.

Response to Arguments

8. Applicant's arguments dated July 26, 2005 have been fully considered but they are not persuasive.

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Applicant argues the secondary reference, Konuma, uses siloxane for a different purpose than Nagayama uses polyimide. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner has relied upon the teaching of Konuma that high molecular weight siloxane is similar to polyimide as an insulative material. Applicant further argues the secondary reference, Konuma, does not teach the further claimed components. The examiner respectfully submits that the features discussed by applicant as not present in the Konuma reference are taught by the primary reference, Nagayama.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571)272-1523. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dawn Garrett
Primary Examiner
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November 10, 2005